

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Water Act, as amended, (M.G.L. Chap. 21, §§ 26-53)

**Twin Rivers Technologies, L.P.
780 Washington Street
Quincy, MA 02169**

is authorized to discharge from the facility located at

**Twin Rivers Technologies, L.P.
780 Washington Street
Quincy, MA 02169**

to receiving water named

**Fore River and Town River to Massachusetts Bay
Weymouth and Weir River Basins (MA74)**

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on the date of signature.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supercedes the permit issued on February 26, 1997.

This permit consists of 6 pages in Part I including effluent limitations, monitoring requirements, and state permit conditions, and 35 pages in Part II including General Conditions and Definitions.

Signed this 31st day of October, 2002

/Signature on File/

Linda M. Murphy, Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

Glenn Haas, Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- During the period beginning on the effective date of the permit and lasting through expiration, the permittee is authorized to discharge through **outfalls 001 and 003**: Storm water and non-contact cooling water. Such discharge shall be limited and monitored by the permittee as specified below:

OUTFALL 001 - Storm water

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type ^{1,2,3}
Flow Rate (million gallons per day)	Report	Report	1/Quarter	Estimate
Oil and Grease (mg/l)	*****	15	1/Quarter	Grab
Total Suspended Solids (mg/l)	Report	100	1/Quarter	Grab
pH Range (SU)	6.5 to 8.5		1/Quarter	Grab

OUTFALL 003* Non-Contact Cooling Water

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type ^{1,2}
Flow Rate (million gallons per day)	5.0	5.0	1/Month	Total Daily
Effluent Temperature (°F)	*****	87	1/Month	2 Grab/Day ⁴
Influent Temperature (°F)	*****	Report	1/Month	2 Grab/Day ⁴
pH Range (SU)	6.5 to 8.5		1/Quarter	Grab

***There shall be no addition of treatment chemicals of any kind to the non-contact cooling water.**

- 1) All samples shall be tested using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136. The permittee shall submit the results to EPA of any additional testing done to that required herein if it is conducted in accordance with EPA approved methods, consistent with the provisions of 40 CFR §122.41(l)(4)(ii).
- 2) Any change in sampling location(s) must be reviewed and approved in writing by EPA and MADEP.
 - Outfall 001- Effluent samples for pH, total suspended solids (TSS) oil and grease, and flow shall be taken at the point of discharge
 - Outfall 003 - Effluent temperature and pH samples shall be taken at the point of discharge.
 - Influent suction crib - Influent temperature shall be taken from the wharf above the suction crib.
- 3) Grab samples shall be taken during the first 30 minutes of the storm event. Effluent samples shall be collected from a discharge resulting from a storm event that is greater than 0.1 inch and at least 72 hours from the previously measurable storm event of greater than 0.1 inch rainfall. The permittee shall report the magnitude of the storm (in inches) and the time elapsed since the previous (greater than 0.1 inch rainfall) storm event.
- 4) Report the average temperature of 2 grab samples taken 6 hours apart. Influent temperatures samples shall be taken within 20 minutes of the effluent samples.

Part I.A. (Continued)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. Pollutants which are not limited by this permit, but which have been specifically disclosed in the permit application, may be discharged up to the frequency and level disclosed in the application, provided that such discharge does not violate Section 307 or 311 of the Clean Water Act (CWA) or applicable state water quality standards.
- c. The effluent shall not contain materials in concentrations or in combinations which are hazardous or toxic to aquatic life or which would impair the uses designated by the classification of the receiving waters.
- d. Discharges shall be adequately treated to insure that the surface water remains free from pollutants in concentrations or combinations that settle to form harmful deposits, float as foam, debris, scum or other visible pollutants. They shall be adequately treated to insure that the surface waters remain free from pollutants which produce odor, color, taste, or turbidity in the receiving water which is not naturally occurring and would render it unsuitable for its designated uses.

- e. The permittee shall maintain a current Spill Prevention Control and Countermeasure Plan (SPCC) and periodically update such plan as necessary under the provisions of 40 CFR §112.1(e).
- f. Changes to equipment or processes that result in significant increases to the heat load discharged from Outfall 003 are cause for reopening the permit for possible modification of the temperature limitations.
- g. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe (40 CFR §122.42):
 - (1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (a) One hundred micrograms per liter (100 ug/l);
 - (b) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
 - (c) Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.
 - (2) That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (a) Five hundred micrograms per liter (500 ug/l);
 - (b) One milligram per liter (1 mg/l) for antimony;
 - (c) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
 - (d) Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.
 - (3) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

C. BEST MANAGEMENT PRACTICES

The permittee is required to insure all measures necessary are in place for adequate maintenance and operation of equipment, appropriate training of staff, and that areas exposed to storm water or that might result in a discharge are kept clean and free of transportable pollutants.

D. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate discharge monitoring report (DMR) forms postmarked no later than the 15th day of the month following the effective date of the permit.

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

U.S. Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

The State Agency is:

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention
205A Lowell Street
Wilmington, MA 01887

In addition, copies of all Discharge Monitoring Reports shall be submitted to the following address:

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street
Worcester, MA 01608

E. STATE PERMIT CONDITIONS

This discharge permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (DEP) under federal and state law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MA DEP pursuant to M.G.L. Chap. 21, §43.

Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared invalid, illegal or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as an NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.